

# NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

## FACT SHEET

(pursuant to NAC 445A.236)

**Permittee Name:**

Lakeview Company (dba)  
Hacienda Hotel & Casino  
U.S. Highway 93  
Boulder City, NV 89005

**Permit Number:**

NEV10007

**Location:**

Treatment plant located approximately 300 feet south of the casino parking lot on the south side of Highway 93.

Latitude: 36° 00' 38" N

Longitude: 114° 46' 00" W

Township 22S, Range 64E, Section 25 Clark County, Nevada

**General:**

The Permittee operates an 85,000 gallon per day (GPD) package wastewater treatment plant, which receives domestic wastewater from the Hacienda Hotel and Casino, formerly Gold Strike Hotel and Casino (the Gold Strike Hotel and Casino property was razed by a fire in 1998). The property is located south of Lake Mead on the southern fringe of Hemenway Wash in the Eldorado Mountain Range. The treatment plant consists of an aerated equalization basin, two (2) extended aeration basins, final clarifier, chlorine contact tank, and an aerated sludge digestion tank. The plant aeration blowers are cycled on/off to achieve nitrification and denitrification of the effluent. The effluent meets secondary treatment standards and is discharged to either three (3) Rapid Infiltration Basins (RIBs) or stored in two (2) asphalt-lined evaporation/detention ponds. Effluent from the evaporation/detention ponds may be applied for dust control on haul roads at a nearby sand and gravel pit. The treatment facility and dust control application areas are fenced and posted. Digested sludge is periodically withdrawn, dried in two (2) sludge drying beds, and hauled by a contract hauler to a sanitary landfill.

**Receiving Water Characteristics:**

Secondary treated, disinfected effluent is discharged to groundwaters of the State of Nevada via percolation in three RIBs. The depth to groundwater beneath the RIBs is approximately 680 feet below surface. Groundwater direction is assumed to be north toward Lake Mead. The groundwater is historically high in Total Dissolved Solids (TDS). The Permittee samples one monitor well downgradient of the RIBs quarterly for groundwater quality parameters, as well as two others monthly for RIB percolation effectiveness. Monitoring Well MW-1 is located just north of the RIBs and detention ponds. Wells MW-2 and MW-3 are located at the north end of the casino property in Hemenway Wash. Based on the topography, perched effluent from the RIBs would presumably flow laterally northward reaching MW-1 first, MW-2 second, and MW-3 last. MW-1 is sampled on a quarterly basis for chlorides, TDS, nitrate as nitrogen, depth to groundwater, and groundwater

elevation. On a monthly basis, all three wells are monitored for the appearance of free standing and surfacing water to see if effluent has perched rather than percolated. According to the Discharge Monitoring Reports (DMRs) from 2001 to present, free standing and surfacing water in the wells has not been observed, thereby indicating proper effluent percolation toward the groundwater aquifer. The DMRs also indicate that MW-1 has been historically dry so that the groundwater surface has not risen to the screened depth of this monitoring well. Groundwater does not appear to be affected by continued discharge of the effluent. NDEP proposes to eliminate monitoring of the wells, and will require appropriate abandonment of the wells, as well as appropriate permit limits to ensure that groundwater continues to be unaffected.

**Effluent Flow and Characteristics:**

The Permittee has applied for an equivalent 30-day average and daily maximum flow limit of 85,000 gallons per day (GPD) and 100,000 GPD, respectively, which are the existing permit limits. The specific permit limitations, standard to all treatment facility dischargers, requires the permittee to notify the Division when the 30-day average daily influent flow rate first equals or exceeds 85% of the 85,000 GPD design treatment capacity. During the period from 2001 to present, the average of the daily maximum flows reported was 55,510 GPD; the permit limit was not exceeded.

During the period from 2001 to present, effluent characteristics were reported as the following:

Parameter	Permit Limit	Average	Maximum Reported	Minimum Reported
Total Suspended Solids (mg/L)	45	8.9	17.0	1.0
BOD5 (mg/L)	45	7.6	84.0	2.0
pH (Standard Units)	6 to 9	7.5	7.5	7.4
Fecal Coliform (CFU- or MPN-/100 ml)	400	2.0	17.0	0
Total Nitrogen (mg/l)	M & R	4.3	18.0	1.0

Nitrification/Denitrification is effectively achieved during operation of the facility. NDEP intends to require that the effluent meet 30-day average Total Nitrogen limit of 10 mg/l, to ensure that any effluent migrating to the groundwater does not degrade water quality.

**Proposed Effluent Limitations and Special Conditions:**

NDEP proposes the following permit limitations and monitoring requirements:

**Table 1 – Plant Discharge Limitations**

PARAMETER		DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
		30 - Day Average	Daily Maximum	Measurement Frequency	Sample Type
Influent	Flow (GPD)	85,000	100,000	Daily	Pump Station Time Clocks
Effluent	Flow to RIBs (Outfall 001) (GPD)	Monitor & Report		Daily	Flow Meter
	Flow to Evaporation/Detention Ponds (Outfall 002) (GPD)	Monitor & Report		Daily	Flow Meter
	TSS (mg/l)	30	45	Monthly	Composite
	BOD5 (mg/l)	30	45	Monthly	Composite
	TSS and BOD5 Removal (percent)	85%		Monthly	Calculate
	pH (Standard Units)	6.0 to 9.0		Monthly	Discrete
	Fecal Coliform (CFU/100 ml or MPN/100 ml)	200	400	Monthly	Discrete
	Total Nitrogen (mg/l)	---	10	Monthly	Composite

**Schedule of Compliance**

- The Permittee shall implement and comply with the provisions of the Schedule of Compliance after approval by the Administrator, including in said implementation and compliance, any additions or modifications that the Administrator may make in approving the Schedule of Compliance.
- By MMM DD, 2006**, the Permittee shall submit a schedule for the plugging and abandonment of the three (3) monitoring wells associated with this permit.
- By MMM DD, 2006**, the Permittee shall submit, for review and approval, any updates to the Operations and Maintenance (O&M) Manual for the facility.
- By February 1, 2007**, the Permittee shall submit copies of the drillers reports, detailing the monitor well plugging and abandonment activities, as required by the Nevada Division of Water Resources.

**Rationale for Permit Requirements**

The monitoring proposed by this permit is consistent with current facility practices and existing permit limitations, to protect groundwater quality.

**Procedures for Public Comment:**

The Notice of the Division's intent to issue a permit authorizing the facility to discharge to groundwaters of the State of Nevada subject to the conditions contained within the permit is being sent to the **Boulder City News** and the **Las Vegas Review Journal** for publication. The notice is also being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing for a period of 30 days following the date of the public notice. The comment period can be extended at the discretion of the Administrator. The deadline at the Division for the receipt of all comments pertaining to this public notice period is **5:00 PM, MMM DD, 2006**.

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator or any interested agency, person or group of persons. The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted.

Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determines to be appropriate. All public hearings must be conducted in accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

**Proposed Determination**

The Division has made the tentative determination to renew and modify the proposed permit for a period of five (5) years.

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